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MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

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TRIMESTER 1, 2015/2016

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### TMX 7011 – INFORMATION SYSTEMS ANALYSIS AND DESIGN

( All sections / Groups )

23 SEPTEMBER 2015  
8.00 p.m. – 10.00 p.m.  
(2 HOURS)

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#### INSTRUCTIONS TO STUDENTS

1. This Question paper consists of **9 pages (including this page)**.
2. Choose **FOUR** out of FIVE questions.
3. Please **WRITE ALL YOUR ANSWERS IN THE QUESTION PAPER ITSELF** in the space allocated.

**Question 1**

- (a) A group meeting is sometimes suggested as a useful compromise between interviews and questionnaires. In such a group meeting, a systems analyst meets with and asks questions to a number of users at one time. Discuss TWO advantages and TWO disadvantages of such a group meeting. [4 marks]

- (b) System development life cycle (SDLC) is a methodology used to develop, maintain, and update information system. Discuss TWO different approaches that could be used to improve system development. [4 marks]

**Continued...**

- (c) What would be the factors for outsourcing part or whole system development to Information Technology Services Firm? Give TWO factors. [2 marks]

[illegible]

### Question 2

- (a) “Functionality is one of the factors to consider in choosing off-the-shelf software”.

Discuss the above statement.

[2 marks]

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Continued...

- (b) Assume you have a project with TEN activities labelled A-J as shown below. Construct a network diagram based on the notation given below. For each activity, calculate its Early Finish (EF) and Late Finish (LF). Show/highlight the critical path on your network diagram. [8 marks]

Activity	Estimated Time (days)	Preceding task
A	4	-
B	5	A
C	6	A
D	7	A
E	6	A, D
F	5	C, E
G	4	D, E
H	3	E
I	4	F, G
J	5	H, I

Activity	Estimated Time
Early Finish	Late Finish

Continued...

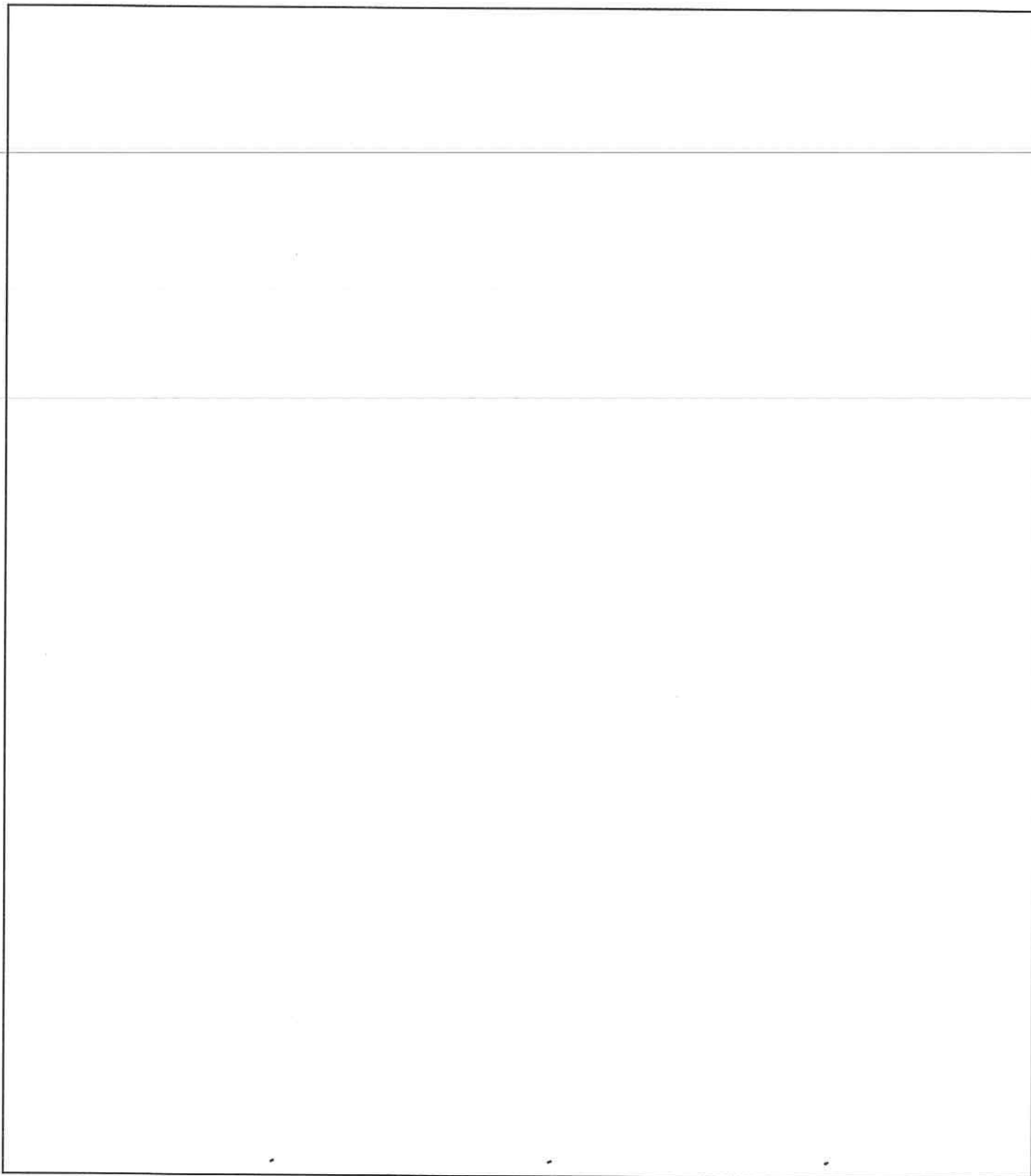
**Question 3**

- (a) Draw an Data Flow Diagram (DFD) based on the following scenario:

Exabot.com is a company that sells robotic vacuum cleaner. When a customer places orders on the company's web site, the system checks to see if the items are in stock, issues a status message to the customer, and generates a shipping order to the warehouse, which fills the order. When the order is shipped, the customer is billed. The system also produces reports to the manager.

- i) Draw a context DFD diagram for the order system.

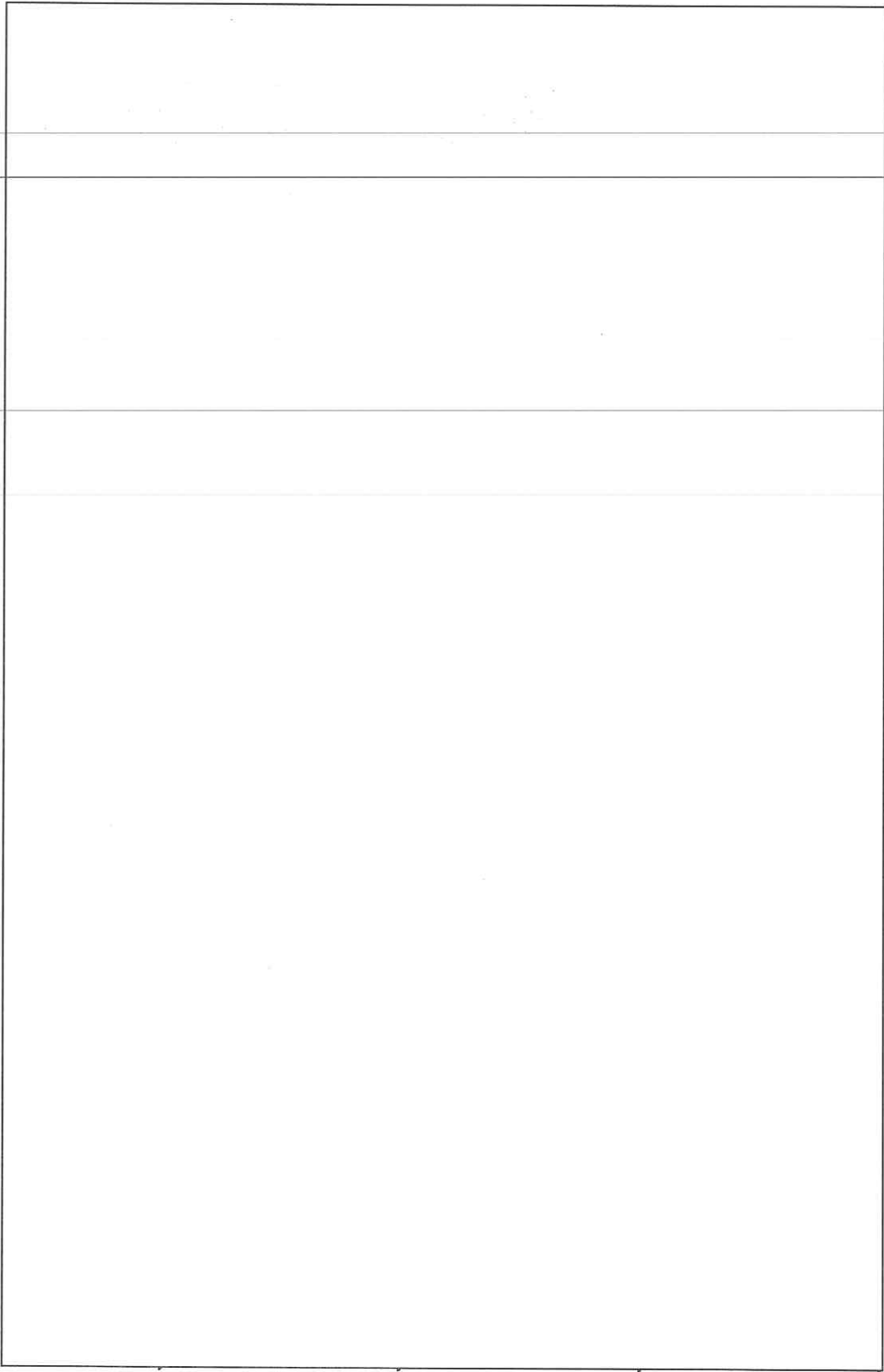
[4 marks]



**Continued...**

ii) Draw a Level-0 DFD diagram for the order system

[6 marks]

A large empty rectangular box with a black border, intended for drawing a Level-0 Data Flow Diagram (DFD) for an order system. The box is positioned in the center of the page, below the question text and above the 'Continued...' text. It is divided into four horizontal sections by three horizontal lines.

Continued...

**Question 4**

- (a) What is top-down planning approach? Identify TWO advantages of the top-down planning approach over other planning approaches

[4 Marks]

- (b) Give THREE drawbacks of using prototyping as a requirements determination tool.

[3 marks]

Continued...

(c) Based on the given unnormalized STUDENT record below, normalize it into 3NF relations.

Student_number	Student_name	Total_credits	GPA	Course_number	Course_description	Grade
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[3 marks]

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### Question 5

(a) For a technical report, when should you use tables? When should you use graphs?  
[4 marks]

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Continued...



- (b) Briefly describe the FOUR types of information system installation. [4 marks]

- (c) What are the deliverables at the end of the maintenance phase of SDLC? [2 marks]

**End of Paper**